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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/003,869	10/24/2001	James S. Siepierski	GP-300966	7506	
7590 05/20/2004			EXAMINER		
CARY W. BROOKS			KALAFUT, STEPHEN J		
General Motors Corporation Legal Staff, Mail Code 482-C23-B21 P.O. Box 300			ART UNIT	PAPER NUMBER	
			1745		
Detroit, MI 48265-3000			DATE MAILED: 05/20/2004	DATE MAILED: 05/20/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

_	Application No.	Applicant(s)				
70	10/003,869	SIEPIERSKI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Stephen J. Kalafut	1745				
The MAILING DATE of this communication app						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
2a) ☐ This action is FINAL . 2b) ☑ This	action is non-final.					
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	.4	·				
4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.		•				
6) Claim(s) is/are rejected.						
7)⊠ Claim(s) <u>1-20</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>24 October 2001</u> is/are:	•	Objected to by the Examiner				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
	•					
Attachmont(c)						
Attachment(s) 1) Notice of References Cited (PTO-892)	4) \prod Intervi	ew Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper	Paper No(s)/Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice 6) Other:	of Informal Patent Application (PTO-152)				

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Claims 1-20 are objected to because of the following informalities: The term "in", in the phrase "to introduce make-up hydrogen in the motor portion", in claims 1, 8 and 19, should instead be "into", since the hydrogen is brought into the sealed assembly from an external source. Note the specification, page 6, lines 6-9. Claims 2-7, 9-18 and 20 depend from claims 1, 8 or 9, and are likewise objected to. Appropriate correction is required.

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reiser *et al.* (US 4,769,297) and Grehier (US 4,075,396) disclose fuel cells with hydrogen recycle loops. Dine *et al.* (US 2002/0098393) disclose a procedure for shutting down a fuel cell with a hydrogen recycle loop. Keefer *et al.* (US 2002/0142208) disclose a fuel cell with a hydrogen separation system comprising a pressure swing absorption module. Sterchi *et al.* (US 2004/0023084) disclose a fuel cell with a hermetically sealed hydrogen pump, but is filed too recently to be presently applicable.

Claims 1-20 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action, above. The prior art does not disclose a fuel cell with a hydrogen

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recycle loop, which includes a hermetically sealed assembly including a pump and blower, into which make-up hydrogen is introduced.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sjk

STEPHEN KALAFUT PRIMARY EXAMINER GROUP / 7 0 C